

Appendix B, Chapter 19

Band-tailed Pigeon



19.0 Band-tailed Pigeon (*Columba fasciata*)

Band-tailed pigeons (*Columba fasciata*) are primarily restricted to coniferous forest zones in mountainous areas of western North America (Jarvis and Passmore 1992); the Pacific Coast race (*Columba fasciata monilis*) breeds west of the Cascade and Sierra Nevada crests up to 4,200 m (13,800 ft) elevation (Pacific Flyway Council 1983). The band-tailed pigeon breeds throughout much of Western Washington (Figure 19-1).

During the breeding season (April - September), most of the population is found below 305 m (1,000 ft) elevation (Jeffrey 1989). In late summer, band-tailed pigeons may move to higher elevations. By late September, most band-tailed pigeons leave Washington and migrate to their wintering grounds.

In Washington, band-tailed pigeons are associated with Douglas-fir (*Pseudotsuga menziesii*), red alder (*Alnus rubra*), western hemlock (*Tsuga heterophylla*), red cedar (*Thuja plicata*), bigleaf maple (*Acer macrophyllum*), sitka spruce (*Picea sitchensis*), willow (*Salix* spp.), pine (*Pinus* spp.), cottonwood (*Populus* spp.), and Garry oak (*Quercus garryana*) (Jeffrey 1989, Braun 1994). Berry- and nut-producing trees and shrubs are also common in their range (Keppie and Braun 2000). Nests are placed in conifers or broad-leaved trees, typically 4.5-12.0 m (15-40 ft) above the ground. Nests may be distributed in small groups or well-dispersed (Jeffrey 1977, Curtis and Braun 1983).

Band-tailed pigeons have specific habitat requirements for reproduction. The band-tailed pigeon requires mineral springs as a source of calcium for egg-laying and the production of crop-milk for its young (March and Sadleir 1975, Jarvis and Passmore 1992, Braun 1994). The proximity of these mineral springs to suitable foraging habitats is an important factor for band-tailed pigeons (Jarvis and Passmore 1992). Pigeons have been documented returning to mineral springs in subsequent years (Jarvis and Passmore 1977, 1992). A mineral spring located in the lower reach of the Wind River has one of the highest concentrations of pigeon use in the state. Current threats to this resource include timber harvest and increased disturbance from recreational development near these mineral springs.

Band-tailed pigeons are listed as a State and Federal Game species. The hunting season in Washington underwent an emergency closure in 1991 due to a rapid decline in the population as determined from pigeon surveys (Braun 1994). Breeding Bird Survey data indicated the population of band-tailed pigeons in Washington declined significantly from 1968 to 1993

(Braun 1994, Keppie and Braun 2000). However, more recent data showed increases in population that allowed the reinstatement of a limited hunting season in 2002, after a 10-year restriction on hunting (WDFW 2001, 2002).

A scarcity of mineral sites combined with the alteration of available nesting habitat jeopardizes band-tailed pigeon populations (Braun 1994). Intensive hunting pressure in the past has also been held responsible for declines in the population (Jarvis and Passmore 1992). Land development and forest practices that degrade or destroy mineral springs and nesting habitat limit band-tailed pigeon populations (Pacific Flyway Council 1983). Although undocumented mineral sites likely occur, only a limited number of mineral sites actively used by pigeons are known to exist in western Washington (Gillum 1993). Outbreaks of the protozoan disease Trichomoniasis are suspected in periodic large-scale mortalities of band-tailed pigeons (Keppie and Braun 2000). Trichomoniasis is transmitted through contaminated feed at urban bird feeders.

Figure 19-1. Distribution of band-tailed pigeon in Washington.

Table 19-1. Band-tailed pigeon association with wildlife habitats in the Wind River subbasin (IBIS 2004).

Wildlife-Habitat Type	Association	Habitat Requisite	Data Confidence	Comments
Mesic Lowlands Conifer-Hardwood Forest	Closely Associated	Feeds and Breeds	Moderate	none
Montane Mixed Conifer Forest	Generally Associated	Feeds and Breeds	High	none
Interior Mixed Conifer Forest	Present	Feeds	High	none